



Structural Criteria for Residential Flush Mounted Rooftop Solar Energy Installations

Use of this document

This document applies to flush-mounted solar arrays installed on the roofs of wood-framed, one- and two- family dwellings. “Flush-mounted” means the modules are installed parallel to, and relatively close to, the roof surface (see the “Solar Array Check” section of the Structural Criteria for specific qualifying requirements). This list is intended to be a simple pre-installation check to gain reasonable assurance that the design of the solar array complies with the structural provisions of the 2013 California Building Code (CBC) and 2013 California Residential Code (CRC). It is not intended to provide post-installation inspection criteria.

1. Installation of equipment shall be as per approved plans. If the installation differs from approved plans, an additional plan review may be required.
2. Work shall be ready for the inspection being requested.
3. All required working clearances for electrical equipment must be provided and maintained.
4. Verify attachment method is per the approved plans and listed rack system installation manual.
5. The lag screw must have a minimum 2 ½” embedment into rafter.
6. Verify framing and load bearings wall are per plans.
7. Composition roofing/shingles – Use a sealant under the shingles to adhere the shingles to the flashing
8. Verify equipment and conduit locations.